## **REMARKS**

Claims 1-15 and 18-22 are currently pending in the subject application and are presently under consideration. Favorable reconsideration of the claims is respectfully requested in view of the comments and amendments herein. Applicants' representative thanks the Examiner for granting the interview during which the rejection under 35 U.S.C. §102(f) was discussed.

## I. Rejection of Claims 1-22 Under 35 U.S.C. §102(f)

Claims 1-22 stand rejected under 35 U.S.C. §102(f) in light of Beal *et al.*, "Audio-Video Sensor Fusion with Probabilistic Graphical Models" ("Beal"). The claims have been amended to recite the limitation a probabilistic-based model comprising a video embedded subspace model fused with an audio mixture model such that a hidden variable that represents the pixel-based image data in lower dimensions depends on a state variable of the speech signal or similar limitations. (*See e.g.*, Application at p. 5, Il. 27-29; p. 6, Il. 3-13; p. 7, Il. 1-4; p. 7, l. 6-p. 9, l. 9; and FIGs. 2-5). Beal does not disclose this novel feature of the claims. Rather, Beal discloses a dependency between the relative time delay of the arrival of speech at two microphones (τ) and the location (l<sub>x</sub> and l<sub>y</sub>) of the speaker in an image. (*See* Beal at §3.3 and FIG. 4). Accordingly, applicants' representative respectfully requests that this rejection be withdrawn.

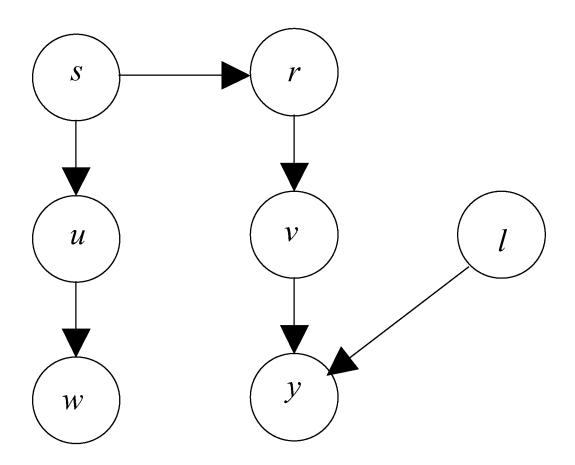
## II. Rejection of Claims 1-22 Under 35 U.S.C. §102(a)

Claims 1-22 stand rejected under 35 U.S.C. §102(a) because the Examiner contends that the claims are anticipated by Beal *et al.*, "Audio-Video Sensor Fusion with Probabilistic Graphical Models" ("Beal"). Applicants' representative respectfully requests that this rejection be withdrawn for at least the following reason. Beal does not disclose a probabilistic-based model comprising a *video embedded subspace model fused with an audio mixture model* such that *a hidden variable that represents the pixel-based image data in lower dimensions depends on a state variable of the speech signal*.

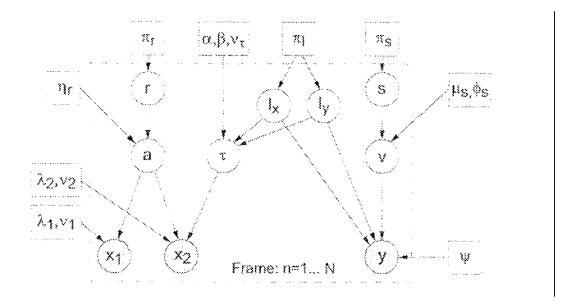
A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. (Trintec

Industries, Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 63 U.S.P.Q.2d 1597 (Fed. Cir. 2002) (emphasis added). Moreover, the identical invention must be shown in as complete detail as is contained in the ... claim. (Richardson v. Suzuki Motor Co., 868 F.2d 1226, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989)) (emphasis added).

All of the claims recite the limitation a probabilistic-based model comprising a video embedded subspace model fused with an audio mixture model such that a hidden variable that represents the pixel-based image data in lower dimensions depends on a state variable of the speech signal or similar limitations. (*See e.g.*, Application at p. 5, ll. 27-29; p. 6, ll. 3-13; p. 7, ll. 1-4; p. 7, l. 6-p. 9, l. 9; and FIGs. 2-5). One example of such a probabilistic-based model is schematically illustrated by the graphical model shown in FIG. 5 where the hidden variable is labeled r and the state variable is labeled s:



In contrast, as shown in FIG. 4 of Beal reproduced below, the graphical model of Beal relies on the dependency between the relative time delay of the arrival of speech at two microphones ( $\tau$ ) and the location ( $l_x$  and  $l_y$ ) of the speaker in an image:



(*See also*, Beal at §3.3). Accordingly, applicants' representative respectfully requests that this rejection be withdrawn. Moreover, the claims as amended are not limited to the embodiment shown in FIG. 5 above as it is but one example of a probabilistic-based model.

## **CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited. In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063[MSFTP436US]. Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,
AMIN, TUROCY & CALVIN, LLP

/Himanshu S. Amin/ Himanshu S. Amin Reg. No. 40,894

AMIN, TUROCY & CALVIN, LLP 24<sup>TH</sup> Floor, National City Center 1900 E. 9<sup>TH</sup> Street Cleveland, Ohio 44114 Telephone (216) 696-8730 Facsimile (216) 696-8731